CYANAMID

Wa. Carteret

American Cyanamid Company
P.O. Box 31
Linden, NJ 07036
(201) 862-6000

February 26, 1982

Mr. Francis Cap
Sanitary Inspector
Board of Health
216 Pershing Avenue
Carteret, N. J. 07008

J. F. TERENZI

Dear Mr. Cap:

This letter is to summarize and confirm the conversation I had with you several weeks ago regarding the Cyanamid Carteret property.

In the course of studies during the summer and fall 1981 on erosion control, our consultant on revegetation, Dames and Moore of Cranford, New Jersey, observed a number of sick and dead seagulls on our site. In a letter to us dated January 5, 1982, they speculated that the birds were being poisoned by something on our site. American Cyanamid retained Dr. Joanna Burger, Chairman of the Rutgers Biology Department and a recognized authority on seagulls and Dr. Michael Gochfield from Rutgers Department of Environmental Medicine. These professors visited the site on January 7, 1982.

Dr. Burger's preliminary report indicates that the seagulls are regularly using the Cyanamid site for loafing, bathing and consuming food scavenged from the municipal landfill. Most of the dead seagulls, according to Dr. Burger, appear to have died in late summer or early fall; they were predominantly immature birds and, based on body pose, appear to have died in a botulism outbreak. Botulism, Dr. Burger has advised, is a known cause of death in seagull populations and may be attributable to the municipal landfill or to stagnant water on our site or to a combination of the two.

As you know, the American Cyanamid Company site is located just north of the Carteret municipal landfill and was used from 1939 to 1973 to collect spent ore from the production of alum and precipitated muds from the production of yellow prussiate of soda. Alum is a chemical used in water treatment and styptic pencils; yellow prussiate of soda is a complex ferrocyanide salt used as an additive to table salt and road salt among other uses. The site has been inactive since 1973.

In May, 1981 toxicological studies were run on representative samples of the muds. The results of the oral toxicity study with rats and dermal irritation studies with rabbits indicate these muds are non-toxic. We have analyzed for complex cyanides, free cyanide and heavy metals in water and mud samples from the site. Complex cyanides were detected (levels as high as 3500 ppm) on shallow core samples of the residues, confirming the presence of yellow prussiate of soda which had been entrained in the muds discharged

to the site. Yellow prussiate of soda is stable and non-toxic. Samples from the Rahway River (both up and down stream) and samples from stagnant water near where large numbers of birds have been observed had no detectable levels of free cyanide. Samples of sub-surface material did contain trace levels of free cyanide. However, our Corporate Toxicologist, Dr. M. A. Friedman, indicates to us that these trace levels of cyanide are non-toxic. Heavy metals such as lead, chromium are also below toxic levels. Based on all these studies and on chemical analyses, we believe that the seagull mortality problem is not due to the material on our site.

Dr. Burger has outlined for us a series of studies to more conclusively ascertain specific causes of seagull deaths. In addition, we will proceed with topographic studies leading to possible future land reclamation of our property.

We have brought this to your attention because the possibility of seagulls dying of botulism may be a public health concern. We welcome your suggestions and will keep you appraised of any further developments. In the interim, please feel free to contact me.

Very truly yours,

J. B. Halladay
Plant Manager

JBH:mes

cc: Dr. J. Burger - Rutgers
Mr. J. Dette - Dames & Moore
Mr. W. Beggs - N.J.D.E.P.
Dir. A. Schiffman - N.J.D.E.P., Div. of Water Resources

bcc: Dr. J. M. Burnell WA
Dr. R. P. Kreahling NA
Mr. W. G. Paxton NA
Dr. J. F. Terenzi NA